Monitoring Data Record

Project Title: R-977A US 64 COE Action ID: 2005301150
Stream Name: UT to Hiwassee River (Site 11) DWQ Number: 3487
City, County and other Location Information: Murphy, Cherokee County, US 64, from US 19-74-129 in Murphy to East of NC 141 in Peachtree (Sta. 12+20 to 15+50)
Date Construction Completed: March 2007 Monitoring Year: (1) of 5
Ecoregion: 8 digit HUC unit 06020002
USGS Quad Name and Coordinates:
Rosgen Classification:
Length of Project: 1150' Urban or Rural: Rural Watershed Size:
Monitoring DATA collected by: M. Green and J. Young Date: 8/13/08
Applicant Information:
Name: NCDOT Roadside Environmental Unit
Address: 1425 Rock Quarry Rd , Raleigh, NC 27610
Telephone Number: (919)861-3772 Email address: mlgreen@dot.state.nc.us
Consultant Information:
Name:
Address:
Telephone Number: Email address:
Project Status:

Monitoring Level required by COE and DWQ (404 permit/ 401 Cert.): Level ~~1~~ **2** ~~3~~
The permittee shall monitor the completed stream relocation in accordance with Monitoring Level 2 of the US Army Corps of Engineers, Wilmington District, Stream Mitigation Guidelines of April 2003. The monitoring reports, including reference photographs, plant survival data and visual inspection notes identifying specific problem areas, will be submitted to the Corps of Engineers, Asheville Regulatory Field Office within 60 days of completion of the monitoring. The monitoring report will also include a discussion of any deviations to channel stability. The success of the stream relocation as project mitigation will be evaluated based on those success criteria listed in the reference Stream Mitigation Guidelines.

Section 1. PHOTO REFERENCE SITES
(Monitoring at all levels must complete this section)

Total number of reference photo locations at this site: 18 photos were taken from 9 photo point locations
Dates reference photos have been taken at this site: 2/11/08, 8/13/08

Individual from whom additional photos can be obtained (name, address, phone):

Other Information relative to site photo reference: A site map with approximate photo point locations is included with this report.

If required to complete Level 3 monitoring only stop here; otherwise, complete section 2.

Section 2. PLANT SURVIVAL
Attach plan sheet indicating reference photos.

Identify specific problem areas (missing, stressed, damaged or dead plantings):
The buffer area upstream of the church driveway culvert (Photo Points 1 through 4) has continued to be mowed. The Residence Office plans to notify the church again about not mowing this area. Planted vegetation is minimal along this section of the stream relocation.

Estimated causes, and proposed/required remedial action: Some additional planting of pussy willow and redtip dogwood was completed downstream of the church driveway culvert. The entire site should be completely planted by December 2008.

ADDITIONAL COMMENTS: The initial planted vegetation consisted of black willow, silky dogwood, black cherry, sycamore, green ash, and white oak. Pussy willow and redtip dogwood were surviving downstream of the church driveway culvert. Other vegetation noted onsite consisted of goldenrod, *Juncus* sp., jewelweed, tear-thumb, ragweed, Queen Ann's Lace, mimosa, pokeberry, and various grasses.

If required to complete Level 1 and Level 2 monitoring only stop here; otherwise, complete section 3.

Section 3. CHANNEL STABILITY

Visual Inspection: The entire stream project as well as each in-stream structure and bank stabilization/revetment structure must be evaluated and problems addressed.

Report on the visual inspection of channel stability. Physical measurements of channel stability/morphology will not be required. Include a discussion of any deviations from as-built and an evaluation of the significance of these deviations and whether they are indicative of a stabilizing or destabilizing situation.

This is the Year 1 Summer evaluation for the UT Hiwassee River stream relocation. A few of the crossvanes continue to have water piping under them, however, the crossvanes are stable. Water is still piping under ground below the driveway culvert due to the blasting that took place during construction to relocate the stream. NCDOT will continue to monitor this stream relocation.

Date Inspected 8/13/08	Station 13+20 PP#7 Downstream Photo	Station 13+00 PP#8 Upstream Photo	Station 13+40 to 13+80 Between PP#5 and PP#6	Station Number	Station Number
Structure Type	Crossvane	Crossvane			
Is water piping through or around structure?	Water piping under crossvane	Water piping under crossvane	Water piping bypassing stream bed underground where blasting took place		
Head cut or down cut present?					
Bank or scour erosion present?					
Other problems noted?					

UT Hiwassee River


Photo Point #1 (Upstream)


Photo Point #1 (Downstream)


Photo Point #2 (Upstream)


Photo Point #2 (Downstream)


Photo Point #3 (Upstream)


Photo Point #3 (Downstream)

Year 1 Summer – August 2008

UT Hiwassee River

Photo Point #4 (Upstream)

Photo Point #4 (Downstream)

Photo Point #5 (Upstream)

Photo Point #5 (Downstream)

Photo Point #6 (Upstream)

Photo Point #6 (Downstream)

Year 1 Summer – August 2008

UT Hiwassee River


Photo Point #7 (Upstream)


Photo Point #7 (Downstream)


Photo Point #8 (Upstream)

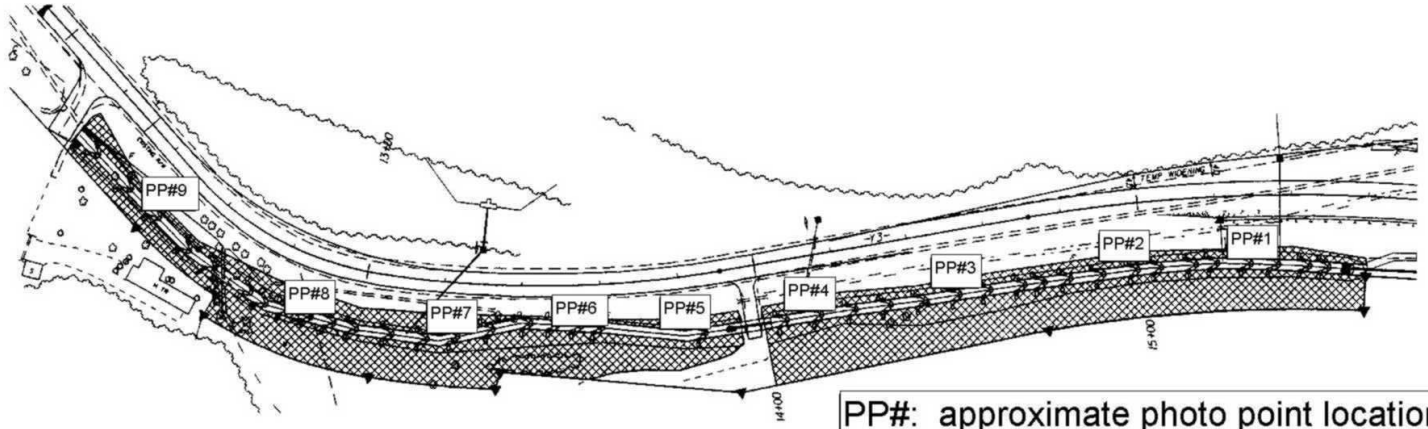

Photo Point #8 (Downstream)


Photo Point #9 (Upstream)


Photo Point #9 (Downstream)

Year 1 Summer – August 2008

UT Hiwassee River
R-977A
Cherokee County



PP#: approximate photo point locations